

# SmartOnline™ Single-Phase Intelligent True On-Line UPS Systems



SU750RTL2U, SU1000RTL2Ua, SU1500RTL2Ua & SU2200RTL2Ua



SU3000RTL3U, SU3000RTL3UHV & SU3000RTR3U



SU5000RT4U, SU6000RT4U, SU8000RT4U, SU16000RT4U\* & SU16000RT4UHW\*  
\* Power module shown.

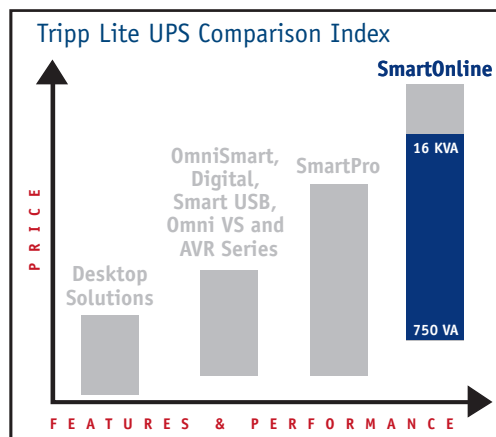


SU5000RT3U, SU5000RT3UHV, SU6000RT3U, SU6000RT3UHV, SU8000RT3U, SU8000RT3UITF, SU8000RT3UHW, SU10000RT3U, SU10000RT3U2TF, SU10KRT3UHV, SU10KRT3U  
Power module shown.

## Deliver True On-Line, Pure Sine Wave, Zero Transfer Time Operation

SmartOnline Rackmount/Tower UPS Systems provide mission-critical equipment with the highest level of power protection. Double-conversion technology continually converts incoming AC power into filtered DC power, and then resynthesizes it back into AC power with a pure sine wave. Constant on-line operation completely isolates sensitive equipment from every power problem on the AC line. SmartOnline models accept the widest range of incoming voltage and frequency variations, delivering the most consistently pure, highly-regulated AC power:  $\pm 3\%$  V or  $\pm 2\%$  V and  $\pm 0.05$  Hz.

SmartOnline Rackmount/Tower UPS Systems provide reliable battery power with zero transfer time to keep networks up and running through short blackouts and allow enough time to safely shut down during longer ones. In addition, they stop damaging surges and filter disruptive line noise.



**Additional Single- and 3-Phase solutions available—750 VA to 80 kVA!**  
**See pages 12 to 21.**

## TRUE ON-LINE

- ▶ 750 - 16,000 VA
- ▶ Zero Transfer Time, Double-Conversion
- ▶ Wide Input Voltage Range with Precision-Regulated Output
- ▶ Internal or External Batteries & Extended Runtime Options
- ▶ Automatic Internal Bypass
- ▶ Maintenance Bypass & Detachable PDU Options
- ▶ Rack/Tower/Stack Adaptable

## Manage Multiple Servers

Multiple built-in communication ports provide the ability to simultaneously manage multiple servers without the need for accessories. Using PowerAlert Software, select models with multiple communication ports will simultaneously provide intelligent communications, shutdown commands and reporting on multiple servers—even if they are running different operating systems.\* Intelligent communications allow you to check UPS status (including battery charge level) and AC power status as well as reboot Customized Load Management Banks.

\* Additional PowerAlert features: pages 24 and 25.

## Control Individual Outlets

Prioritize the uptime of mission-critical loads during a power failure with Customized Load Management Banks featured on select models. Customized Load Management Banks can be controlled independently through PowerAlert. Use PowerAlert to reboot a locked-up computer by cycling the power on and off to select receptacles on the UPS system. You can also program PowerAlert to shut down less important systems during an extended blackout, preserving battery runtime for more critical equipment.

## Provide 100% Availability with Hot-Swappable Modular Design



**Hot-Swap the UPS Module . . .**



**. . . PDU Module Continues Powering Equipment**

All SmartOnline Rackmount/Tower UPS Systems include an automatic internal bypass that ensures 100% availability of connected equipment by passing through utility power in the event of an internal fault or overload. Hot-Swappable Modular models include two additional features that ensure continuous availability: an external maintenance bypass switch and a modular design. When the external switch is set to "bypass", the UPS module can be removed for maintenance while the detachable PDU module remains installed, continuing to power connected equipment as long as utility power is present.

## Adapt to Rack/ Tower/Stack Applications

Adapt all models from rackmount to tower or stacking applications.\*

- Removable rack hardware
- Optional base stands



*SU3000RTXL3U tower mount with optional base stands.*



*SU6000RT3U or SU10KRT3U tower mount with optional base stands.*

\* Optional base stands (model: 2-9USTAND) are available to adapt any combination of models, from 2U to 9U wide, to tower mounting.

## Display Critical Operational Conditions

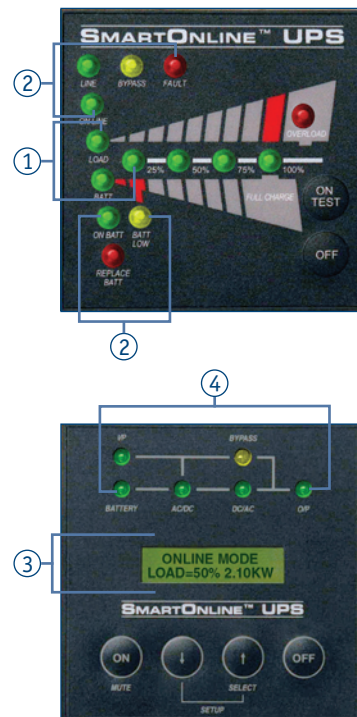
SmartOnline Rackmount/Tower UPS Systems feature a front panel LED display or combination LCD/LED display which shows a variety of UPS operational modes and conditions. This interface provides more information than comparable models, allowing you to react more rapidly to an alert before your systems are put at risk.

**LED Display— ① Battery & Load Conditions:** The Load and Battery Active Meters allow you to monitor the percentage levels (25% - 100%) of two conditions: 1) battery charge as equipment is supported by the UPS system during a blackout, and 2) the total amount of the UPS system's capacity that the equipment load is utilizing under normal operating conditions.

**② Fault/Warning & UPS System Operational Conditions:** LED set alerts you to several fault conditions (including wiring faults in the wall outlet) and warning conditions (including the need to recharge or replace the UPS system's internal battery). It also indicates UPS system operational status, including normal on-line operation, bypass operation (due to fault or overload) or on-battery operation (due to a blackout or severe brownout).

**Combination LCD/LED Display— ③ LCD Display:** LCD Display lets you access more precise information than provided by LEDs alone. View over 45 separate fault/warning and UPS system operational conditions including operational mode, alarm/shutdown conditions, input/output voltage/frequency, battery voltage, load percentage and more.

**④ LED Display:** LED set is organized into a flow chart that indicates UPS system operational status, including normal on-line operation, bypass operation (due to fault or overload) or on-battery operation (due to a blackout or severe brownout).





## A Extended Runtime Capability

All models feature connectors that accept optional external battery packs for additional runtime. External batteries can be “hot-swapped”. See Extended Runtime Chart on page 11 to locate the perfect SmartOnline Rackmount/Tower model that fits your runtime needs.



## B Detachable PDU

Passes through power to connected equipment if UPS module is removed for maintenance.

## C Customized Load Management

Select models feature special load banks that you control independently through PowerAlert Software.

## D Server Support

Up to two built-in communication ports on select models simultaneously provide shutdown commands and reporting on multiple servers without the need for accessories.

## E Bypass Operation

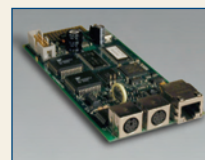
An external maintenance bypass switch allows the UPS module to be removed for maintenance while continuously passing through utility power to connected equipment.



## F NMS Integration

Accessory slot accepts an optional internal SNMP/Web card\* for remote shutdowns, reboots and more. Use card with optional environmental sensor\*\* to remotely monitor environmental conditions or to control alarm/security systems.

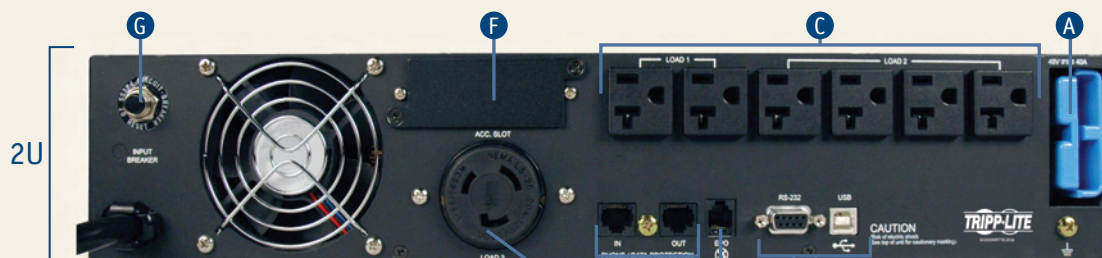
\* Model: SNMPWEBCARD \*\* Model: ENVIROSENSE



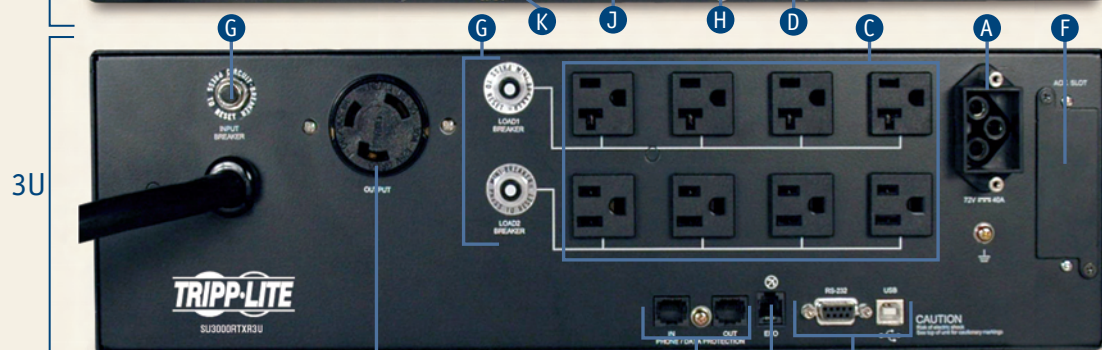
## G Short Circuit Protection

Circuit breakers help guard against input/output short circuits and system overloads.

### Standard Models 100% Availability Features: Internal Bypass • Hot-Swappable Batteries



SU2200RTL2Ua UPS System Rear Panel with Internal Batteries.



SU3000RTX3U/  
SU3000RTXR3U  
UPS System Rear Panel with Internal Batteries.



SU5000RT3U UPS System Rear Panel with Isolation Transformer Module and External Battery Pack.





#### H Emergency Power Off

A modular jack included with select models allows remote emergency shutdown. All other models can perform emergency shutdown by attaching an optional cable (model 73-0909, sold separately) to the communication port. The optional cable includes a DB9 connector to allow server support and a modular jack to allow emergency shutdown.

#### I Hardwire, Single-Phase Input

To convert select models to hardwire input and output, select optional hardwire input/output PDUs. To add an input plug and receptacles to SU6000RT3U and SU6000RT3UHV select SUPDM alternate back panel accessories.

#### J Phone/DSL/Ethernet Surge Protection (Select Models)

Protect Internet-connected or networked computers from damage on a single phone/DSL/Ethernet line with surge-protected jacks featured on select models.

#### K Variety of Output Options

15-, 20- and 30-amp receptacles on select models ensure maximum connection flexibility.

#### Front Panel Battery Replacement (not shown)

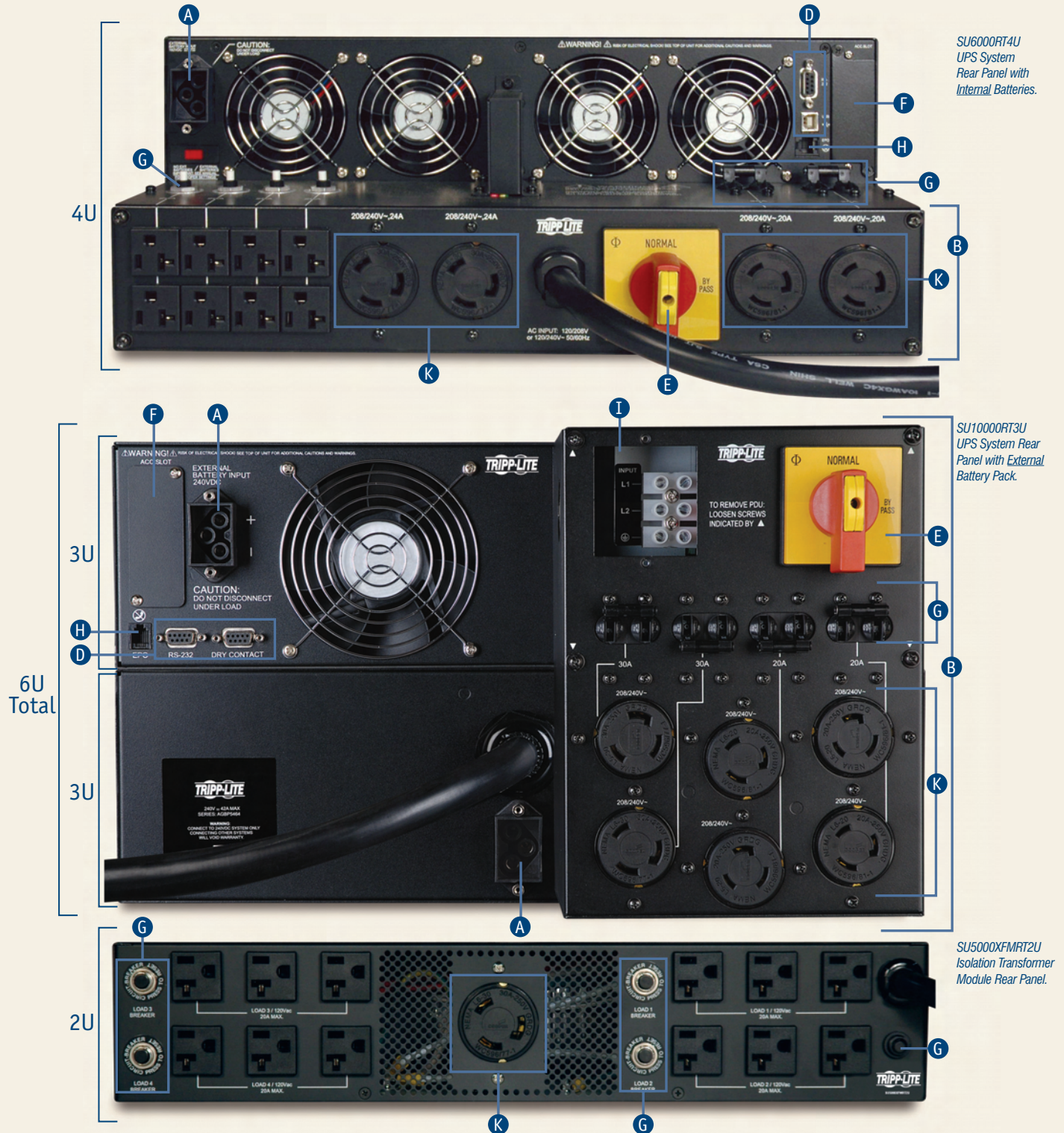
1,000 to 3,000 VA models feature a convenient front access door to replace internal batteries.\* All models allow "hot-swap" battery replacement.

\* Tripp Lite offers a complete line of replacement battery cartridges (R.B.C.); visit [www.tripplite.com](http://www.tripplite.com).

### Hot-Swappable Modular Models 100% Availability Features:

Internal Bypass • External Bypass Switch • Modular Design (Detachable UPS Module, PDU Module & Battery Module\*) • Hot-Swappable Batteries

\* Select models feature internal batteries.



## Specifications



Model	Output Capacity (VA/Watts)	Back-up Time (Typical Minutes) Half/Full Load <sup>(B)</sup>	Optional External Battery Packs	Rack Space	Input Voltage Range/Frequency (Hz)	Nominal Output Voltage	AC Receptacles Quantity	NEMA Type	USB	Communication "Smart" RS-232 (DB9)	Ports Contact Closure (DB9)	Input Plug (NEMA)	Power Cord Length (ft)
<b>UPS Systems</b>													
<b>SU750RTL2U</b>	750/600	11/4+		2U	65-138 (50/60) <sup>(C)</sup>	120 (100/110/120)	6	5-15R <sup>(D)(E)</sup>	1	1 <sup>(F)</sup>	—	5-15P	10
<b>SU1000RTL2Ua</b>	1000/800	14/4.5+		2U	65-138 (50/60) <sup>(C)</sup>	120 (100/110/120)	6	5-15R <sup>(D)(E)</sup>	1	1 <sup>(F)</sup>	—	5-15P	10
<b>SU1500RTL2Ua</b>	1500/1200	17/5+		2U	65-138 (50/60) <sup>(C)</sup>	120 (100/110/120)	6	5-15R <sup>(D)(E)</sup>	1	1 <sup>(F)</sup>	—	5-15P	10
<b>SU2200RTL2Ua</b>	2200/1600	14/4.5+		2U	65-138 (50/60) <sup>(C)</sup>	120 (110/120)	7	6 (5-15/20R), 1 (L5-20R) <sup>(D)(E)</sup>	1	1 <sup>(F)</sup>	—	5-20P <sup>(G)</sup>	10
<b>SU3000RTL3U</b>	3000/2400	14/5+		3U	65-138 (50/60) <sup>(C)</sup>	120 (110/120)	9	4 (5-15R), 4 (5-15/20R), 1 (L5-30R) <sup>(D)(E)</sup>	1	1 <sup>(F)</sup>	—	L5-30P	10
<b>SU3000RTXR3U</b>	3000/2400	33/14+		3U	65-138 (50/60) <sup>(C)</sup>	120 (110/120)	9	4 (5-15R), 4 (5-15/20R), 1 (L5-30R) <sup>(D)(E)</sup>	1	1 <sup>(F)</sup>	—	L5-30P	10
<b>SU3000RTL3UHV</b>	3000/2400	17/6+		3U	160-275 (50/60) <sup>(C)</sup>	208/240	8	6 (6-15/20R), 2 (L6-20R) <sup>(D)</sup>	—	1 <sup>(F)</sup>	—	L6-20P	10
<b>SU5000RT4U</b>	5000/3800	17/8+		4U	65-140 (60) (L-N)	208/240 & 120	12	8 (5-15/20R), 2 (L6-20R), 2 (L6-30R)	1	1 <sup>(F)</sup>	—	L14-30P (split phase 4 wire)	10
<b>SU5000RT3U</b>	5000/3500	20/8+		3U (power module), 2U (battery module) & 2U (transformer module)	156-276 (50/60) <sup>(C)</sup>	208 & 120	16	2 (L6-20R), 2 (L6-30R), 12 (5-15/20R)	—	1	1	L6-30P	10
<b>SU5000RT3UHV<sup>(A)</sup></b>	5000/3500	20/8+		3U (power module) & 2U (battery module)	156-276 (50/60) <sup>(C)</sup>	208/240	4	2 (L6-20R), 2 (L6-30R)	—	1	1	L6-30P	10
<b>SU6000RT4U</b>	6000/4200	24/9+		4U	65-140 (60) (L-N)	208/240 & 120	12	8 (5-15/20R), 2 (L6-20R), 2 (L6-30R)	1	1 <sup>(F)</sup>	—	L14-30P (split phase 4 wire)	10
<b>SU6000RT3U</b>	6000/4200	37/15+		3U (power module), 3U (battery module) & 3U (transformer module)	156-276 (50/60) <sup>(C)</sup>	208/240 & 120	hardwire <sup>(H)</sup>		—	1	1	hardwire <sup>(H)</sup>	
<b>SU6000RT3UHV</b>	6000/4200	37/15+		3U (power module) & 3U (battery module)	156-276 (50/60) <sup>(C)</sup>	208/240	hardwire <sup>(H)</sup>		—	1	1	hardwire <sup>(H)</sup>	
<b>SU8000RT4U</b>	8000/5600	12/5+		4U	65-140 (60) (L-N)	208/240 & 120	8	4 (5-15/20R), 2 (L6-20R), 2 (L6-30R) plus hardwire	1	1 <sup>(F)</sup>	—	hardwire (split phase 4 wire)	
<b>SU8000RT3U</b>	8000/6400	15/6+		3U (power module) & 3U (battery module)	156-276 (50/60) <sup>(C)</sup>	208/240	6	4 (L6-20R), 2 (L6-30R)	—	1	1	hardwire	
<b>SU8000RT3U1TF</b>	8000/6400	15/6+		3U (power module), 3U (battery module) & 2U (transformer module)	156-276 (50/60) <sup>(C)</sup>	208 & 120	18	4 (L6-20R), 2 (L6-30R), 12 (5-15/20R)	—	1	1	hardwire	
<b>SU8000RT3UHW</b>	8000/6400	15/6+		3U (power module) & 3U (battery module)	156-276 (50/60) <sup>(C)</sup>	208/240	hardwire		—	1	1	hardwire	
<b>SU10000RT3U</b>	10000/8000	10/4+		3U (power module) & 3U (battery module)	156-276 (50/60) <sup>(C)</sup>	208/240	6	4 (L6-20R), 2 (L6-30R)	—	1	1	hardwire	
<b>SU10000RT3U2TF</b>	10000/8000	10/4+		3U (power module), 3U (battery module) & 4U (2 transformer modules)	156-276 (50/60) <sup>(C)</sup>	208 & 120	18	4 (L6-20R), 2 (L6-30R), 12 (5-15/20R)	—	1	1	hardwire	
<b>SU10KRT3UHV</b>	10000/8000	10/4+		3U (power module) & 3U (battery module)	156-276 (50/60) <sup>(C)</sup>	208/240	hardwire		—	1	1	hardwire	
<b>SU10KRT3U</b>	10000/8000	10/4+		3U (power module), 3U (battery module) & 3U (transformer module)	156-276 (50/60) <sup>(C)</sup>	208/240 & 120	hardwire		—	1	1	hardwire	
<b>SU16000RT4U</b>	16000/11200	12/5+		4U (power module) & 4U (battery module)	100-140 (60) (L-N)	208/240 & 120	13	5 (5-15/20R), 2 (L6-30R), 6 (C19)	1	1 <sup>(F)</sup>	—	hardwire (4 wire)	
<b>SU16000RT4UHW</b>	16000/11200	12/5+		4U (power module) & 4U (battery module)	100-140 (60) (L-N)	208/240 & 120	hardwire		1	1 <sup>(F)</sup>	—	hardwire (4 wire)	

*Complete, up-to-date specifications (including product weight and dimensions) available at [www.tripplite.com](http://www.tripplite.com)*

Also available: interactive UPS System selector guide, extended warranties, owner's manuals and more!



## Extend Runtime

All models accept external battery packs to provide extended runtime. Without enough runtime, businesses stand to lose up to \$50,000 per hour according to a recent survey on the cost of lost productivity for an hour of network downtime.\* Locate your planned load and optimum runtime on the chart to the right.

\* Yankee Group.



Extending runtime is as simple as plugging in additional external battery packs.

For additional extended runtime solutions to fit your specific load requirements, use Tripp Lite's interactive UPS Selector Guide at [www.triplite.com/selector/ups](http://www.triplite.com/selector/ups), or call Tripp Lite's Application Specialists at (773) 869-1236.

Load (Watts)	Runtime (minutes) with included batteries*	Runtime (minutes) with additional external battery packs				
		Non-Expandable Battery Pack	Expandable Battery Pack(s)**			
			1	2	3	4
<b>SU750RTXL2U</b>		<b>BP24V28-2U</b>	<b>BP24V70-3U</b>			
300	11.0	88.0	224.4	461.7	699.1	933.8
600	4.0	44.1	117.1	249.9	386.3	523.3
<b>SU1000RTXL2Ua</b>		<b>BP24V28-2U</b>	<b>BP24V70-3U</b>			
400	17.4	77.6	199.6	413.3	628.1	841.1
800	6.0	32.4	87.3	189.1	295.2	402.5
<b>SU1500RTXL2Ua</b>		<b>BP48V24-2U</b>	<b>BP48V60RT3U</b>			
600	17.0	80.3	164.6	334.2	506.1	677.5
1200	5.0	33.6	71.3	151.0	234.8	320.2
<b>SU2200RTXL2Ua</b>		<b>BP48V24-2U</b>	<b>BP48V60RT3U</b>			
800	14.0	56.2	117.0	241.9	370.3	499.3
1600	4.5	23.1	49.7	107.0	168.2	231.2
<b>SU3000RTXL3U &amp; SU3000RTXL3UHV</b>		<b>BP72V15-2U</b>	<b>BP72V28RT-3U</b>			
1200	17.0	40.9	77.6	157.8	241.9	327.3
2400	6.0	16.8	32.8	69.1	108.4	149.5
<b>SU3000RTXR3U</b>		<b>BP72V15-2U</b>	<b>BP72V28RT-3U</b>			
1200	33.0	58.8	97.1	178.6	263.1	348.8
2400	14.0	24.6	41.5	78.7	118.6	159.9
<b>SU5000RT3U &amp; SU5000RT3UHV</b>		<b>BP240V10RT3U</b>				
1740	20.1	N/A	73.1	161.6	225.8	291.0
3500	8.0	N/A	30.6	70.2	100.0	130.9
<b>SU5000RT4U</b>		<b>BP192V12-3U</b>				
1740	22.8	N/A	107.9	174.9	243.9	313.8
3750	8.0	N/A	42.5	70.7	100.7	131.7
<b>SU6000RT3U &amp; SU6000RT3UHV</b>		<b>BP240V10RT3U</b>				
2100	37.0	N/A	80.0	130.9	183.9	237.9
4200	15.0	N/A	33.4	55.9	80.0	105.1
<b>SU6000RT4U</b>		<b>BP192V12-3U</b>				
2100	24.0	N/A	86.6	141.4	198.2	256.0
4200	9.0	N/A	36.8	61.5	87.8	115.2
<b>SU8000RT4U</b>		<b>BP192V12-3U</b>				
2800	12.0	N/A	45.8	100.0	141.4	183.8
5600	5.0	N/A	19.0	42.8	61.5	81.1
<b>SU8000RT3U, SU8000RT3U1TF &amp; SU8000RT3UHV</b>		<b>BP240V10RT3U</b>				
3200	15.0	N/A	46.0	76.4	108.7	142.0
6400	6.0	N/A	18.6	31.6	45.6	60.4
<b>SU10KRT3U, SU10KRT3UHV, SU10000RT3U &amp; SU10000RT3U2TF</b>		<b>BP240V10RT3U</b>				
4000	10.0	N/A	35.1	58.6	83.8	110.0
8000	4.0	N/A	13.7	23.5	34.1	45.3
<b>SU16000RT4U &amp; SU16000RT4UHV</b>		<b>BP192V18-4U</b>				
5600	12.0	N/A	42.2	70.2	100.0	130.9
11200	5.0	N/A	17.1	29.2	42.2	55.9

\* Included batteries are contained either internally within the UPS system or are offered as an external module, depending on model. \*\* Battery packs which are "expandable" can be connected together for increased runtime.

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Model	Description
<b>External Battery Packs and Accessories</b>	
<b>A</b> BP24V28-2U	24V external battery pack and cable, 2U. Not expandable. RED/BLACK 2-point connector.
<b>B</b> BP24V70-3U	24V external battery pack and cable, 3U. Expandable. RED/BLACK 2-point connector.
<b>C</b> BP48V24-2U	48V external battery pack and cable, 2U. Not expandable. BLUE 2-point connector.
<b>D</b> BP48V60RT3U	48V external battery pack and cable, 3U. Expandable. BLUE 2-point connector.
<b>E</b> BP72V15-2U	72V external battery pack and cable, 2U. Not expandable. BLACK 3-point connector.
<b>F</b> BP72V28RT-3U	72V external battery pack and cable, 3U. Expandable. BLACK 3-point connector.
<b>G</b> BP192V12-3U	192V external battery pack and cable, 3U. Expandable. BLACK 3-point connector.
<b>H</b> BP192V18-4U	192V external battery pack and cable, 4U. Expandable. YELLOW INSULATED 2-point connector.
<b>I</b> BP240V10RT3U	240V external battery pack and cable, 3U. Expandable. BLACK 3-point connector.
SU5000XFMRT2U	2U rack/tower mount isolation transformer. 208V input (L6-30P plug), 100/120V output. Outlets: 12 (5-15/20R) and 1 (L6-30R).
SUPDM56HW	Hardwire PDU. Replaces UPS system's detachable PDU. (for SU5000RT4U, SU6000RT4U models only).
SUPDMB710HW	Hardwire PDU. Replaces UPS system's detachable PDU. (for SU8000RT3U, SU10000RT3U models only).
SUPDMB16KHW	Hardwire PDU. Replaces UPS system's detachable PDU. (for SU16000RT4U model only).
SUPDM11	Converts hardwired to L6-30P plug/cord & two L6-30R outlets. <b>200/208/240V</b> (for SU6000RT3UHV model only).
SUPDM12	Converts hardwired to L6-30P plug/cord & 13 outlets: ten <b>120V</b> (5-15/20R), two <b>208V</b> (L6-20R), one <b>208V</b> (L6-30R) (for SU6000RT3U model only).
SUPDM13	Converts hardwired to L6-30P plug/cord & 13 outlets: ten <b>120V</b> (5-15/20R), two <b>240V</b> (L6-20R), one <b>240V</b> (L6-30R) (for SU6000RT3U model only).
SNMPWEBCARD	Internal SNMP/Web management accessory card (connects compatible UPS systems to Ethernet).
ENVIROSENSE	Allows UPS to monitor external temperature/humidity & contact-closure inputs (requires SNMPWEBCARD).
2-9USTAND	Tower kit with 2 adjustable base stands—2U to 9U.
2POSTRMKITWM	Horizontal mounting rails for 2-post rackmount installation. For all UPS and battery pack models.

**Common specifications for all UPS systems:** SNMP/Web accessory slot (for use with optional SNMPWEBCARD, sold separately). All models are designed with mounting hardware to fit standard 19 in. racks. + Backup times are expandable using external battery packs. (A) Optional SU5000XFMRT2U isolation transformer is available to provide 100/120V output. (B) Backup times will vary depending on battery condition and load. (C) Auto-selecting frequency. (D) Includes customized load management receptacles. (E) Includes phone/DSL/Ethernet surge protection. (F) Includes a single combination RS-232 and contact-closure port. (G) This model includes an additional 5-15P plug which can be installed in place of the existing plug. Installing the additional plug will change the output capacity. (H) Converts to ten 5-15/20R, two L6-30R and one L6-30R outlets via optional SUPDM12 or SUPDM13. (I) Converts to two L6-30R outlets via optional SUPDM11. (J) Converts to L6-30P plug via optional SUPDM11. (K) Certifications vary by model. The policy of Tripp Lite is one of continuous improvement. Specifications are subject to change without notice. Actual product may differ slightly from photos.

**Complete, up-to-date specifications (including product weight and dimensions) available at [www.triplite.com](http://www.triplite.com)**

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